

Warm Ups - Week 12 (Do on Back of HW)

Write an equation of the line that passes through the points

- 1) $(-8, 9), (10, -3)$

$$m = \frac{9 - (-3)}{-8 - 10} = \frac{12}{-18}$$

$$m = -\frac{2}{3}$$

$$y = -\frac{2}{3}x + \frac{11}{3}$$

$$(x, y) \quad m = -\frac{2}{3}$$

$$y = mx + b$$

$$-3 = -\frac{2}{3}(10) + b$$

$$-3 = -\frac{20}{3} + b$$

$$+20/3 \quad +20/3$$

$$b = \frac{11}{3}$$

- 2) Write an equation that is perpendicular to the line in #1 and goes through the point $(0, 6)$

~~$$m = -\frac{2}{3}$$~~

$$m = \frac{3}{2}$$

$$y = mx + b$$

$$6 = \frac{3}{2}(0) + b$$

$$b = 6$$

$$y = \frac{3}{2}x + 6$$

Homework Questions?

44) $(8.5, 6.75), (3.33, -9.75)$
 $(-8.5, 6.75)$

$$m = \frac{-9.75 - 6.75}{3.33 + 8.5} = \frac{-16.5}{11.83} = \frac{-1650}{1183}$$

$$m = \frac{-1650}{1183}$$

$$(-8.5, 6.75)$$

$$6.75 = \frac{-1650}{1183}(-8.5) + b$$

$$b = \frac{-24159}{4732}$$

5-3 Perpendicular Lines - More Notes

*Take out a piece of paper

5.3 Homework

Parallel & Perpendicular Lines
Practice Problems wkst (p.125 & 126)